





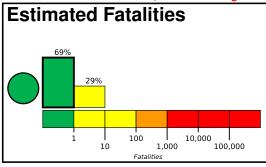
**PAGER** 

Version 4

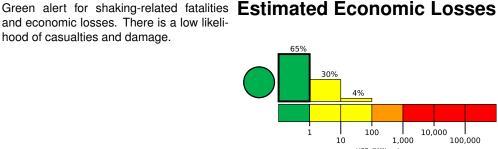
# M 4.1, 40 km N of Valdez, Alaska

Origin Time: 2020-09-13 15:10:09 UTC (Sun 07:10:09 local) Location: 61.4924° N 146.3972° W Depth: 31.7 km

FOR TSUNAMI INFORMATION, SEE: tsunami.gov



and economic losses. There is a low likelihood of casualties and damage.



Created: 38 minutes, 22 seconds after earthquake

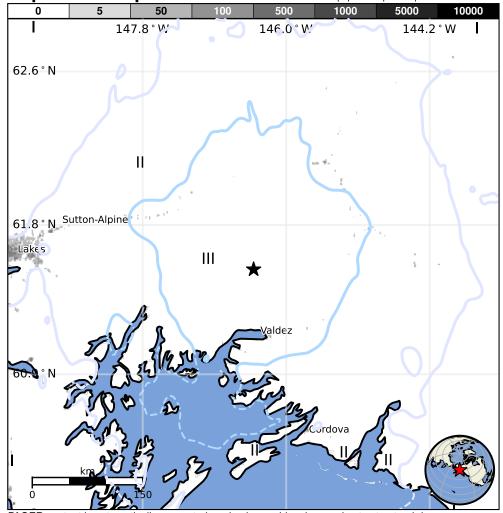
**Estimated Population Exposed to Earthquake Shaking** 

ESTIMATED POPULATION EXPOSURE (k=x1000)		7k*	54k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVED	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
DAMAGE	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

# Population Exposure

population per 1 sq. km from Landscan



#### PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. https://earthquake.usgs.gov/earthquakes/eventpage/ak020bta3ut8#pager

#### **Structures**

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
2002-11-03	237	7.9	V(36k)	0
1964-03-28	84	9.2	VIII(24k)	_
1964-03-28	84	9.2	VIII(24k)	0

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

## **Selected City Exposure**

from GeoNames.org					
MMI	City	Population			
Ш	Valdez	4k			
II	Sutton-Alpine	1k			
II	Butte	3k			
II	Palmer	6k			
II	Farm Loop	1k			
II	Lakes	8k			
II	Gateway	6k			
I	Cordova	2k			
1	Girdwood	2k			
1	Fishhook	5k			
1	Bear Creek	2k			

bold cities appear on map.

(k = x1000)